

REMARKS

In response to paragraph 1 of the Office action, the word “comprising” has been removed from the Abstract. The Abstract has also been amended to replace “odd extrema” with --first extrema-- and the to replace “even extrema” with --second extrema--.

In response to paragraph 2 of the Office action, the claims have been amended to replace “odd extrema” with --first extrema-- (the extrema produced from the values in the odd positions within the original data set) and to replace “even extrema” with --second extrema-- (the extrema produced from the values in the even positions within the original data set).

It is respectfully submitted that each of the independent claims in the instant application produces a useful, concrete, and tangible result. For example, claim 1 recites a method of separating a set of values into an odd set corresponding to values in odd positions within the original data set and an even set corresponding to values in even positions within the original data set. A first extrema is determined from the odd set, and a second extrema is determined from the even set. Next, a local extrema is determined from the first extrema and the second extrema. The local extrema is then saved. The recited method is useful in that it determines a local extrema for a processing element. The method recited in claim 1 is concrete in that it is repeatable. A specific value, a local extrema, is determined and stored for future use. The stored local extrema is tangible in the sense that it has meaning in the real world, and is therefore not abstract.

The same is true of claim 14 which is another method that has, as its steps, identifying bytes of data having one of an odd or even position within a data stream. The bytes in the odd position are processed to produce a first extrema, and the bytes in even positions are processed to produce a second extrema. A local extrema is determined from the first extrema and the second extrema, and the local extrema is then stored. Thus, claim 14, like claim 1, produces a useful, concrete, and tangible result.

Claim 21, like claims 1 and 14, is a method for determining a local extrema for a processing element. Odd-numbered bytes of data are loaded into a first plurality of registers and even-numbered bytes of data are loaded into a second plurality of registers. The loaded odd-numbered bytes are compared to produce a first extrema, and the loaded even-numbered bytes are compared to produce a second extrema. A local extrema is produced in response to the first extrema and the second extrema, and the local extrema is stored. Just as with claims 1 and 14, claim 21 recites a method which produces a

tangible thing (a local extrema stored in a register) such that the claim, overall, produces a useful, concrete, and tangible result.

Independent claim 31 is an apparatus claim which corresponds to method claim 1. For the same reasons set forth above with respect to claim 1, it is believed that apparatus claim 31 sets forth subject matter which is useful, concrete, and tangible.

In paragraph 4 of the Office action, claims 1-31 are provisionally rejected under the judicially created doctrine of the obviousness-type double patenting as being unpatentable over (1) claims 14-21 of copending Application No. 10/689,256 and (2) claims 14-20 of copending Application No. 10/689,449. It is respectfully submitted that the provisional obviousness-type double patenting rejection is improper inasmuch as the two copending applications have the same filing date as the instant application, i.e., neither of the copending applications has an earlier effective filing date. As a result, there can be no unjustified or improper time-wise extension of the "right to exclude" granted by the instant application should it issue as a patent. For that reason, it is respectfully requested that the obviousness-type double patenting rejection be withdrawn.

It is applicant's position that all of the objections raised in the Office action have been addressed by the applicant. Accordingly, applicant is of the opinion that claims 1-31 are in condition for allowance. If the examiner is of the opinion that the instant case is in condition for disposition other than through allowance, the examiner is respectfully requested to contact the applicant's attorney at the number listed below.

Respectfully submitted,



Edward L. Pencoske
Reg. No. 29,688
Jones Day
One Mellon Center
500 Grant Street, 31st Floor
Pittsburgh, PA 15219
Telephone: (412) 394-9531
Fax: (412) 394-7959